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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/586,904

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Grant Alan David Wallett

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EXAMINER

BEACH, THOMAS A

ART UNIT

PAPER NUMBER

3671

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/586,904	Applicant(s) WALLET, GRANT ALAN DAVID	
	Examiner THOMAS A. BEACH	Art Unit 3671	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 1 is objected to because of the following informalities: on line 27, "tile" appears to be a typographical error. Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soczka 6,219,946 in view of Isley et al 5,974,705. Soczka bucket (38) for a mechanical shovel (10), the bucket having a hollow body provided with an inlet for receiving material into its interior and an outlet (82) for discharging material therefrom, the bucket having, secured to the body, a door (86) which is movable relative to the body between a closed condition in which it closes the outlet of the bucket so that material cannot be discharged therefrom, and an open condition in which it permits discharge under gravity of material from the bucket, the bucket also including at least one buffering device (98, abstract) operatively connected between the body and the door of the bucket for buffering movement of the door relative to the body, the bucket being characterized in that each buffering device is in the form of a working fluid-containing telescopically

Art Unit: 3671

extensible and retractable piston-and-cylinder assembly (98) including a cylinder (38) and a piston (36) longitudinally slidably received in the cylinder, the piston having a piston rod (138) projecting longitudinally from an end of the cylinder and a piston head (122) located in the cylinder and slidably sealingly engaging the wall of the cylinder, two compartments (130, 126) containing working fluid being defined respectively between the piston head and the respective opposite ends of the cylinder, the piston-and-cylinder assembly being operatively connected between the body and the door such that opening of the door causes the piston-and-cylinder assembly to retract and closing of the door causes it to extend, the piston-and-cylinder assembly also including a fluid flow control assembly (166) via which the two compartments are in fluid flow communication with each other, the fluid flow control assembly being constructed and arranged to cause fluid flow through the fluid flow assembly from the compartment remote from the end of the cylinder from which the piston rod projects to the compartment adjacent the end of the cylinder from which the piston rod projects during opening of the door (figs 2-5), but does not cause throttled fluid flow through the fluid flow assembly from the compartment adjacent the end of the piston from which the piston rod projects to the compartment remote from the end of the cylinder from which the piston rod projects during closing of the door, which throttled flow is throttled relative to the fluid flow during opening of the door, such that movement of the door towards its closed condition is buffered relative to movement of the door towards its open condition (figs 2-5).

However, Isley shows a similar bucket (38) for a mechanical shovel (10), the bucket having a hollow body provided with an inlet for receiving material into its interior and an outlet (82) for discharging material therefrom, the bucket having, at least one buffering device 60 with a valve block (99) for use with a rotary hydraulic damper (60) for dampening the movement of a bucket door (fig 1) by throttled fluid flow through the fluid flow assembly from the compartment adjacent the end of the piston from which the piston rod projects to the compartment (72A and 72B) remote from the end of the cylinder from which the piston rod projects during closing of the door (fig 6 and 9) with the flow control valve (101) in an adjustable restricted way (fig 9) during opening of the bucket door (flow direction from the return port to the pressure port in fig 9) through the check valve (102) and during closing of the bucket door (flow direction from the pressure port to the return port in fig 9). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Soczka, as taught by Isley, to include a controlled throttle valve in the dampening device for the expected result of improved adjustable control of the door during opening and closing operations, thus preventing damage to the bucket.

As concern claim 2, the combination (Isley) shows in that the fluid flow control assembly includes a non-return valve (102) permitting flow of fluid through the flow control assembly only during opening of the door, and a throttle device (99) for throttling fluid flow through the flow control assembly during closing of the door.

As concern claim 3, the combination (Isley) shows the throttle device (99) is constructed to permit adjustment of the fluid flow rate through the flow control assembly (101), to permit adjustment of the degree of buffering.

As concern claim 4, the combination (Isley) shows t the fluid flow control assembly includes a pressure-relief valve (103) for overriding the action of the throttling device when the pressure of the fluid as it flows through the flow control assembly during closing of the door exceeds a predetermined threshold pressure, to discontinue the throttling.

As concern claim 5, the combination (Soczka) shows the door is hingedly (90) secured to the bucket, such that it hinges between its closed condition and its open condition, with the cylinder and the projecting end of the piston rod respectively being provided with securing formations by means of which the piston-and-cylinder assembly is hingedly secured in position between the body and the door.

As concern claim 6, the combination (Soczka) shows the fluid flow control assembly is located outside the interior of the cylinder of the piston-and-cylinder assembly (fig 2)

As concern claim 7, the combination (Soczka) shows the fluid flow control assembly is located in the interior of the cylinder of the piston-and-cylinder assembly (fig 3).

As concern claim 8, the combination (Isley) shows the bucket includes a releasable latch (42) for retaining the door in its closed condition.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Beach whose telephone number is 571.272.6988. The examiner can normally be reached on Monday-Friday, 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Will can be reached on 571.272.6998. The fax phone number for the organization where this application or proceeding is assigned is 571.273.8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thomas A. Beach

/Thomas A Beach/
Primary Examiner, Art Unit 3671

July 29, 2008

THOMAS A. BEACH

Application/Control Number: 10/586,904
Art Unit: 3671

Page 7

Primary Examiner
Group 3600